

INTERNATIONAL SEARCH REPORT

International Application No
PCT/CA 03/02032

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01D5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 03810 A (MOUNT DENNIS WILLIAM) 18 January 2001 (2001-01-18) cited in the application page 8, line 16 -page 9, line 2; figure 1	1, 3
X	page 9, line 4-11	2, 4, 9
A	page 9, line 13-16	10
X	page 12, line 4-17; figure 4	23, 25, 26
A	GB 2 227 682 A (AUTOSTILLS) 8 August 1990 (1990-08-08) abstract; figure 1 page 1, paragraphs 2, 3	1-26
A	US 5 873 980 A (PORTIS GERALD L ET AL) 23 February 1999 (1999-02-23) column 1, line 65 -column 2, line 15; figure 5	1-26
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

7 April 2004

Date of mailing of the international search report

16/04/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 2002/036158 A1 (AUSTIN DOUGLAS P) 28 March 2002 (2002-03-28) paragraphs '0030!-'0037!; figure 2</p>	10-26

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1,3,11-13,19-22

A distillation apparatus system, suitable for vaporizing process liquids such as a solvent from a contaminated liquid mass, said system comprising a distillation means comprising a distillation vessel and heating means, conduit means extending between and communicating with said distillation vessel and said contaminated liquid mass, whereby said distillation vessel, said conduit means and said contaminated liquid mass form a closed loop system.

2. Claims: 2,4-9,14-16,18-22

A distillation apparatus system, suitable for vaporizing process liquids such as a solvent from a contaminated liquid mass, said system comprising a distillation means comprising a distillation vessel and heating means, first conduit means extending between and communicating with said distillation vessel and said contaminated liquid mass, second conduit means for conveying vapour from said distillation vessel, whereby said distillation vessel, said first conduit means and said contaminated liquid mass form a closed loop system and whereby valve means are located in said conduits to permit unidirectional passage of liquid to and vapour from the distillation vessel.

3. Claims: 10,17,19-22

A contaminated solvent recycling apparatus system, suitable for recycling clean solvent from a contaminated liquid mass containing a plurality of solvent fractions, said system comprising a distillation means comprising a distillation vessel and heating means, first conduit means extending between and communicating with said distillation vessel and said contaminated liquid mass, a plurality of second conduit means for conveying said different vapourized solvent fractions to different containers from said distillation vessel, whereby said distillation vessel, said first conduit means and said contaminated liquid mass form a closed loop system and whereby a first valve means is located in said first conduit means to permit unidirectional passage of liquid to the distillation vessel and a plurality of second valve means are respectively located in said second conduits to selectively permit passage of said solvent fractions from said distillation vessel.

4. Claims: 23-26

A distillation unit, suitable for use in a contaminated

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

solvent recycling system for recycling clean solvent from contaminated solvent feed, said unit comprising a distillation vessel and heating means, said distillation vessel comprising a distillation zone and a separate waste collection zone, means for removing waste from said distillation zone, means for introducing contaminated solvent feed into said distillation zone and means for removing said waste from said waste collection zone.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

CA 03/02032

Pat nt document cited in search report		Publication date	Patent family member(s)	Publicati n date
WO 0103810	A	18-01-2001	CA 2277449 A1 AU 5958300 A WO 0103810 A2 EP 1200166 A2 JP 2003504177 T	07-01-2001 30-01-2001 18-01-2001 02-05-2002 04-02-2003
GB 2227682	A	08-08-1990	NONE	
US 5873980	A	23-02-1999	NONE	
US 2002036158	A1	28-03-2002	AU 8314601 A WO 0211850 A1	18-02-2002 14-02-2002